

# Indoor Wireless/Wired IP Network Camera Model XX34A

**User Manual** 



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#### 1 INTRODUCTION

This is an integrated wireless IP Camera solution. It combines a high quality digital Video Camera with network connectivity and a powerful web server to bring clear pictures to your Desktop from anywhere on your local network or over the Internet.

The main function of the camera is to transmit remote video over IP network. The high quality video image can be transmitted with 30fps speed on the LAN/WAN by using MJPEG hardware compression technology. It is based on the TCP/IP standard, build-in WEB server which supports Internet Explorer. Therefore the management and maintenance of your camera becomes simple by using the network to achieve the remote configuration, start-up and to upgrade firmware.

You can use your IP Camera to monitor your home or your office. Also, controlling and managing images are simple by visiting the web site.

#### 1.1 Features

- ☆ Powerful high-speed video protocol processor
- ☆ High-sensitivity 1/4" CMOS sensor
- ☆ Picture total 300K pixels
- ☆ Supports Pan and Tilt (PT) control, Pan 270°, Tilt 120°
- ☆ Optimized MJPEG video compression for transmission
- ☆ Multi-level user management and passwords definition
- ☆ Embedded Web Server for users to visit by IE
- ☆ Supports wireless network (WI-FI/802.11/b/g)
- ☆ Supports Dynamic IP (DDNS) and UPNP LAN and Internet (ADSL, Cable Modem)
- ☆ Gives an alarm in case of motion detection
- ☆ Supports image snapshot
- ☆ Supports multiple protocols: HTTP/TCP/IP/UDP/SMTP/DDNS/SNTP/DHCP/FTP
- ☆ Supports WEP/WPA/WPA2 encryption
- ☆ Supports 3G phone, Smart phone control and surveillance
- ☆ Supports IE, Firefox, Safari, and Google chrome browsers

# 1.2 Packing List

Please check that the following items are included:

- IP Camera
- Wi-Fi Antenna
- User Manual & Quick Setup Guide
- DC Power Supply
- CD
- Network Cable
- Mounting bracket

# 1.3 Product Views

## 1.3.1 Front View



Figure 1.1

1 Light Sensitive Hole: For light sensitive photocell

2 Infrared LED: 10 LEDs

**3 LENS:** CMOS sensor with fixed focus lens. (Default is 6mm, 3.6mm optional)

**4 Network Indicator LED:** If there is network activity, the LED will blink

**5 Microphone:** Build-in microphone

6 Speaker: Build-in speaker

7 Wireless Antenna: WI-FI Antenna

## 1.3.2 Rear Panel



Figure 1.2

**LAN:** RJ-45/10-100 base T **Power:** DC 5V/2A power supply

Network Light: The green LED is on when connected to the network, the yellow LED blinks when data is

transferred.

**Audio Output:** The jack is used to connect an external speaker **I/O PINS:** 1: Output A 2: Output B 3: Alarm input 4: Input (GND)

## 1.3.3 Bottom View



Figure 1.3

Please note the unique MAC and DDNS addresses on the bottom of the camera (different for every camera). **RESET BUTTON:** Press and hold the RESET BUTTON for 15 Seconds to reset the camera back to the factory default settings. (Please keep the power on when doing a RESET)

# 1.4 PC System Requirements

System configuration requirements:

**CPU:** 2.06 GHZ or above. **Memory**: 256M or above. **Network Card:** 10M or above.

**Display Card**: 64M or above memory.

Recommended Operating system: Windows XP, Windows Vista, Windows 7.

#### 1.5 Hardware Installation

Follow the steps below to set up your camera hardware.

1. Install the Wi-Fi antenna.

- 2. Plug the power adaptor into the camera and into an AC outlet.
- 3. Plug the network cable into the camera and router/switch.



- 4. It takes approx 30 seconds to boot up the camera, then you will find the IP address from "IP Camera Tool" (Figure 2.1).
- 5. When the power is on and the network cable is connected, the green LED on the rear panel will stay on. The yellow LED will keep flashing, and the Indicator LED on the front of the camera will flash. (The indicator LED can be controlled by software).

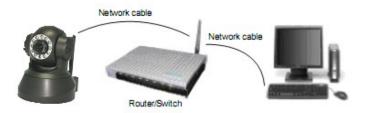


Figure 1.4

## 1.6 Software Installation

**Attention**: In order to make the installation correctly, we suggest that you turn off your Firewall and Antivirus software before installing ActiveX. Correct software installation is essential to the successful use of this product. Install the following software:

**1. IP Camera Tool**: Open the CD, double click "**IPCamSetup.exe**" then click **next** to complete the software installation. (Figure 1.6, 1.7, 1.8).

# 2. ActiveX: Double click "Appinstall.exe"—"Next"—"Install"—"Finish".



Figure 1.5



Figure 1.6

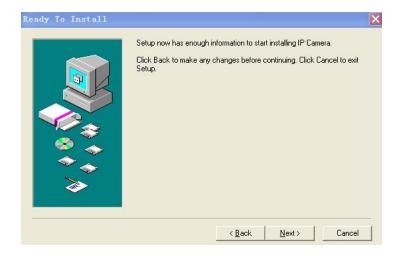


Figure 1.7

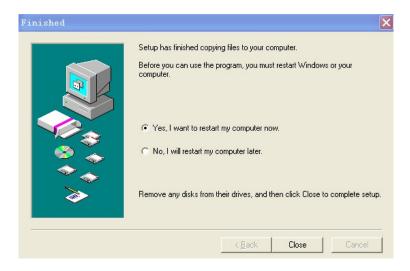


Figure 1.8



After this is done, the icon "IP Camera Tool"

will be displayed on your desktop.

**CAUTION:** Before installing and using the product, please read the following precautions carefully and make sure they are fully understood.

Use only the power adaptor included with the product. Use of an unauthorized power adapter may cause damage to your IP Camera.

The IP Camera should be installed indoors only.

Do not touch the lens of the IP Camera. The optimum focus range has been set for you. If you turn the lens, it may cause incorrect focus and blurry images.

Do not turn the Pan/Tilt by force, it may cause damage to internal components of the Pan/Tilt mechanism.

For firmware upgrading or connection with an external device, refer to detailed instructions contained in the CD.

## 2. SOFTWARE OPERATION

#### 2.1 IP Camera Tool

When the Device has been mounted properly, you can double-click the Icon "IP Camera Tool"



and a dialog box shown in Figure 1.9 will pop up.

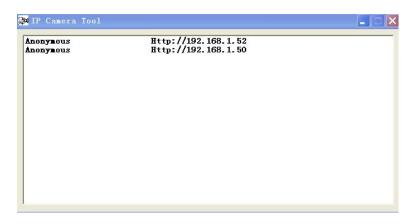


Figure 1.9

Note: The software searches IP Servers automatically over your LAN. There are 3 cases:

- 1. No IP Cameras found within LAN. After about 1 minute search, the Result Field will show "not found IP Server" and the program shut down automatically.
- 2. IP Cameras have been installed within LAN. All the IP Cameras will be listed and the total number is displayed in the result field as shown in Figure 1.9.
- 3. The IP Cameras installed within LAN do not share the same subnet with the monitoring PC. A prompt will be shown in result field (prompt: **Subnet doesn't match, double click to change!**). Click the left mouse button to choose the prompt and click the right mouse button, choose **Network Configuration** to set the static IP address of the Camera to the same subnet as your LAN. (Figure 2.3).

**NOTE**: If it shows" **Subnet doesn't match, double click to change**!" you can also choose "**Obtain IP from DHCP Server**" to get a dynamic IP. (Figure 2.2).

## 2.1.1 Six Options

Choose the IP Camera list and Click the right mouse button, there are six options: (Figure 2.0). Basic Properties, Network Configuration, Upgrade Firmware, Refresh Camera List, Flush Arp Buffer, About IP Camera Tool.

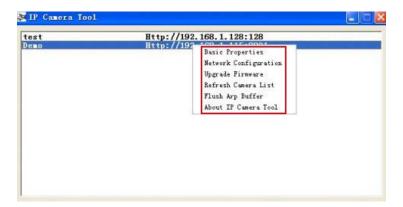


Figure 2.0

## 2.1.1 .1 Basic Properties

There is some device information in the Basic Properties, such as **Device ID**, **System Firmware Version**, and **Web UI Version**. (Figure 2.1).

The **Device ID** is the camera's **MAC ID**, which should be the same as shown on the sticker on the bottom of the camera. Every camera has a unique MAC ID. So if there are many IP addresses shown in the list, check the MAC ID on the bottom of the camera, so you can ensure which camera it is.

Sometimes, if there is no IP address shown on the IP Camera tool, it could be blocked by a firewall, in this case you need to add the MAC ID to the router, and give it a fixed IP or add the MAC ID as a trusted site. There are two MAC Addresses, one is the Device MAC ID, the other is the WIFI MAC ID.

**WIFI MAC ID**, you can find it on the sticker on the bottom of the camera, you can also login to your WIFI router, check the host status, which will show all the WIFI devices connected to your router, you can also find the IPCAM's WIFI MAC ID there.

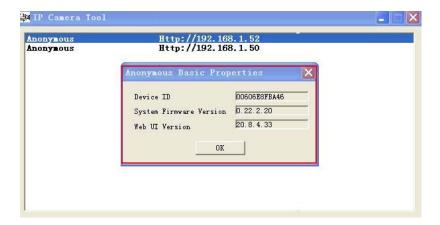


Figure 2.1

## 2.1.1.2 Network Configuration

Below shows how you can configure the Network parameters.



Figure 2.2

**Obtain IP from DHCP server:** If clicked, the device will obtain IP from DHCP server. In other words, the camera will have a dynamic IP. (Make sure the Router which the camera connects to has DHCP function and DHCP is enabled). (Figure 2.2).

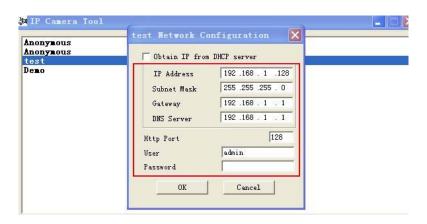


Figure 2.3

**IP address:** Fill in the IP address assigned and make sure it is in the same subnet as the **Gateway**, and the subnet should be the same as your computer or router. (I.e. the first three sections are the same).

**Subnet Mask:** The default subnet mask of the equipment is: 255.255.255.0. You can find the subnet mask from your PC or router.

**Gateway:** Make sure it is in the same subnet with PC's IP address .Here gateway is the LAN IP of your router. **DNS Server:** IP address of ISP network provider. You can also set it to the same as the Gateway.

**NOTE**: You can find the **Subnet Mask**, **Gateway**, **DNS Server** from your router, or check the local connection status of your computer, to get all the parameters. Normally two DNS servers are optional.

**Http Port:** LAN port assigned for the equipment, default is 80. You could set another port number like 81, 801, 8001 etc.

User: Default administrator username is: admin (please make sure all are lowercase letters).

Password: Default password is bank, i.e. no password.

**NOTE:** If the prompt "subnet doesn't match, double chick to change!" appears, please set the **IP Address**, **Subnet Mask**, **Gateway**, **DNS Server** once again, or enable **Obtain IP from DHCP server**.

## 2.1.1.3 Upgrade Firmware

Enter the correct User and Password to upgrade system Firmware and Web UI. Please **upgrade system firmware first** and **then upgrade Web UI** or it may damage the camera. (Figure 2.4).

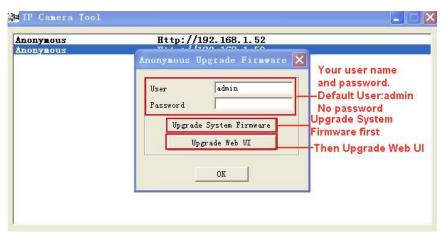


Figure 2.4

Please download the firmware package for the correct type of your camera before you upgrade. Follow the upgrade document carefully to upgrade. Please see readme file first before you upgrade.

**CAUTION:** You should not upgrade the firmware unnecessarily. It is possible to damage the camera if a mistake is made during the upgrade. If your camera works well with the current firmware, we recommend that you don't upgrade it.

**NOTE:** When doing an upgrade, remember you must keep the power on, and it's best to use wired mode, connected via the network cable.

#### 2.1.1.4 Refresh Camera List

Refresh camera list manually.

#### 2.1.1.5 Flush Arp Buffer

When cable network and wireless network of the device are fixed IP address, you may encounter a problem where you can search the camera IP but can't open the camera web page. In this case use Flush Arp Buffer.

#### 2.1.1.6 About IP Camera Tool

Check the IP Camera Tool Version and IP Camera ActiveX Control Version here.

## 2.2 Camera Login

You can access the camera through **IP Camera Tool** or **IE, Firefox, Safari, Google Chrome** or other standard browser directly.

1. Double click the IP address of the IP Camera listed (Figure 1.9). The default browser you use will run automatically and go to the camera login interface. (Figure 2.6).

2. To access the camera by IE Browser directly, just type the camera's IP address, for example, if the camera's IP address is 192.168.1.123:

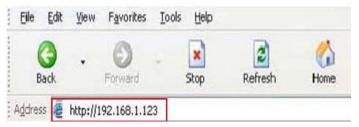


Figure 2.5



Figure 2.6

The default user name is admin, no password (leave blank).

Input the correct user name and password, the Sign In interface will pop-up. There are three models to login (figure 2.7).

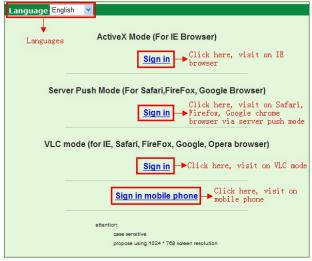


Figure 2.7

- (1) Active Mode (For IE Browser): available in IE 6.0 or above.
- (2) "Server Push Mode": available in Firefox, Safari, and Google Chrome browser.
- (3) "Sign in mobile phone": available in Mobile phone.

# 2.3 For IE Browser

Choose ActiveX Mode (For IE Browser), and sign in.



Figure 2.8

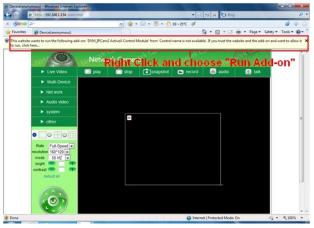


Figure 2.9

The first time you login to the camera, you might get an ActiveX prompt as in the picture above, please click the prompt and choose **Run Add-on**, refresh and login to the camera again, then will see live video, as below.

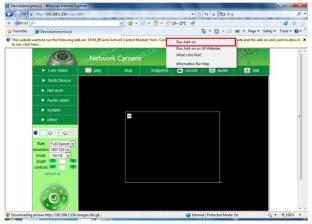


Figure 3.0

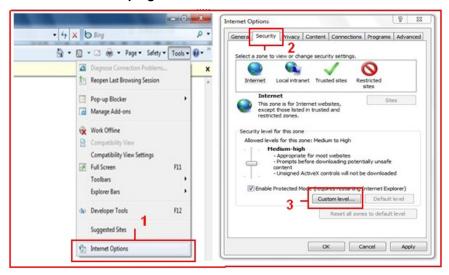
Note: If there is still no live video after you run ActiveX, and a red cross shows in the center of the screen, or even just a black screen, please try to enable the ActiveX options of IE security settings. Please do the following steps:

- 1. Close the firewall of your computer.
- 2. Change the ActiveX settings, "IE" browser > "Tool" > "Internet Options" > "Security"> "Custom Level" > "ActiveX control and Plug-ins", all the ActiveX options set to be "Enable": Especially:

**Enable: Download unsigned ActiveX controls** 

Enable: Initialize and script ActiveX controls not marked as safe

Enable: Run ActiveX controls and plug-ins



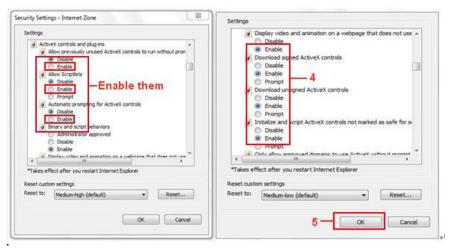


Figure 3.1

You can also click "Start" menu->"Internet Explorer", and choose "Internet attributes", or via "Control Panel" -> "Internet Explorer", to access Security settings.

If you allowed the ActiveX to run, but still cannot see live video, only a Red Cross in the center of the video, and the device status light changed to yellow color not green, please change to another port number. Don't use port 80, use another port such as 128, 1008 etc.

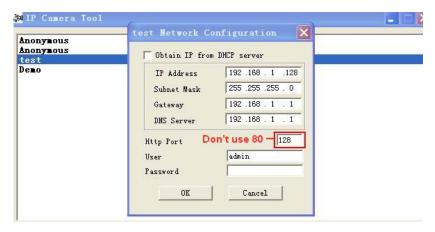


Figure 3.2

**NOTE**: Make sure that your firewall or anti-virus software doesn't block the software or ActiveX. If you couldn't see live video, please close your firewall or anti-virus software, and try again.

# 2.4 For Safari, Firefox, Google Browser

Choose **Server Push Mode (For Safari, Firefox, Google Browser)**, and sign in.

Server Push Mode doesn't support ActiveX, so some functions are not available, such as **Play**, **Stop**, **Record**, **Audio**, **Talk** etc. If you want to use these functions, please use IE browser.



Figure 3.3

## 2.5 For Mobile Phone

Choose Sign in mobile phone, and sign in.

Mobile phone doesn't support ActiveX, so only some basic functions are available in this mode.

It supports iPhone, Smart phone, 3G phone, etc. Normally, if the mobile phone supports network video, then it should work with your IP Camera.



Figure 3.4

# 2.6 ActiveX Mode (For IE Browser)

Login to the camera in ActiveX mode, the main User Interface is as below:

**NOTE:** There are 3 levels of users, **Visitor, Operator, Administrator**, if you login with different users, the use authority is different. (**See 3.11 User Settings**, Figure 8.5).

## 2.7 For Visitor

When you login as Visitor, you can enter the IP Camera for visitor. Visitor is the lowest level with only some operation available.



Figure 3.5

#### Channels:

The IE software supports 9 channels. Click

Click this one to view the main channel of the camera you login to.

Click this one to view 4 Channels of cameras that are connected, from CH1 to CH4.

Click this one to view 9 Channels of cameras that are connected, from CH1 to CH9.

NOTE: If you want to view 4/9 channels, you should set the Multi-Device first (See 3.1 Multi-Device Settings).

# Status of Channels:

There are 9 icons at the bottom of the UI which show the status of each channel of the camera.

- Grey color, means there is no device connected to the main device for this channel.
- Green color, means the device is connected for this channel, and it works well.
- Red color, means the device for this channel is recording.
- Yellow color, means this channel is set in multi-device already, but it fails to connect to the main device.



## **OSD Settings**:



Figure 3.6

**OSD:** Means "On-Screen Display", click "**Audio video**" > "**OSD**", set display date and time on the video.

**Disabled**: Clicking this one means clear the OSD.

Color: Can set the OSD text color as black, yellow, red, white, blue etc.

Add time stamp on record: if you click this, there will be time OSD on record video files.



Figure 3.7

#### Rate and Resolution:

Rate: Set video frame here, from "full-speed to 1fp/5s". (Figure 3.8).

**Resolution:** Set the resolution to be 160\*120/ VGA (640\*480)/ QVGA (320\*240). (Figure 3.9).

NOTE: When doing recording, Rate and Resolution parameter settings is very helpful for getting smaller sized record files, lower the parameter to get a smaller file.

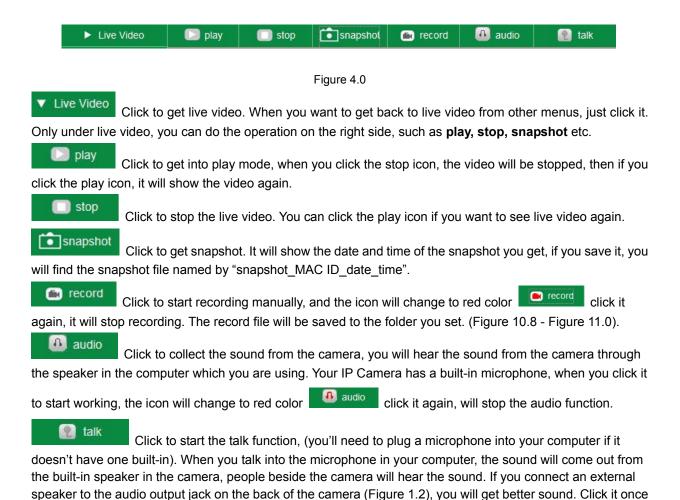


to start, the icon will change to red color

Figure 3.8

Figure 3.9

## **TOP Menu**:



**NOTE:** For visitor, if you click other menus which visitors don't have the right to operate, there will be a pop-up for the login interface (Figure 2.6), please input the user name / password for at least 3 times to login again.

click it again to stop the talk function.

ntalk

# 2.8 For Operator

When you login as Operator, you can enter the IP Camera for Operator.

For operator, it not only supports all the functions for Visitor, but also supports these functions below:

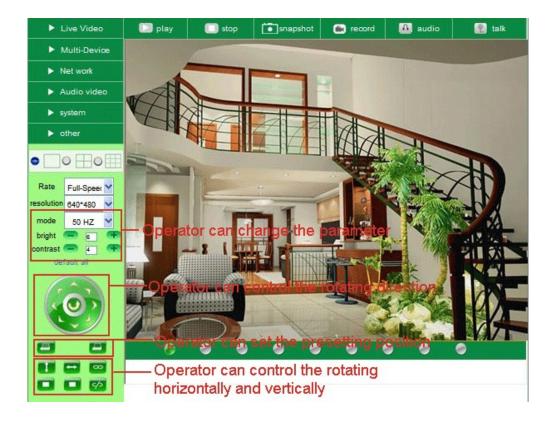


Figure 4.1

# **Audio Video Settings**

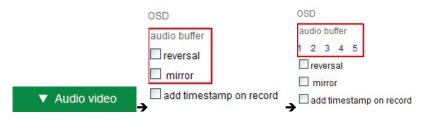


Figure 4.2

Audio buffer: Click this icon, it will show five numbers, which means 1/2/3/4/5 seconds buffer of audio.

**Reversal**: Click this icon to reverse (flip) the image. Click again to go back to normal.

**Mirror**: Click this icon to see a mirror image. Click again to go back to normal.

**NOTE**: You can choose Reversal and Mirror function when you set up the camera in a special position (upside down for example).

#### Mode, Bright, Contrast Settings

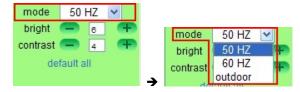


Figure 4.3

**Mode**: This mode is optional, 50HZ/60HZ for the users who use 50HZ/60HZ frequency, outdoor for users who want to use the camera to monitor towards an outdoor environment.

NOTE: The camera should be used in an indoor environment (unless protected from the elements).

**Bright**: Set the parameters to adjust the image quality of the video. Click to adjust the value.

Contrast: Set the parameters to adjust the image quality of the video. Click to adjust the value.

Default all: Click it to set all the parameters back to the factory setting.

**NOTE**: If you login to the camera, and there is no video displayed, or the parameter of bright/contrast is blank, you can try to click "default all" to set the parameters back to the factory setting to get live video.

#### Pan/Tilt Control



Figure 4.4

- Click this icon, the camera will pan/tilt, and then stop at the center. Normally it will rotate 1 circle.
- Click this icon, camera will move up, you can click one by one or hold it to control the movement.
- Click this icon, camera will move down, you can click one by one or hold it to control the movement.

NOTE: It is the same operation as left, right, up-left, up-right, down-left, down-right etc.

- Click this icon, camera will rotate up and down, i.e., vertical tilt, click u to stop it.
- Click this icon, camera will rotate left and right, i.e., horizontal pan, click 🔲 to stop it.
- Click this icon, IO output Switch ON. Click 🧀 to set it OFF.

#### **RECOMMENDATION:**

**Image PT function:** Image Pan/Tilt (PT) function is recommended, you can control the camera direction on the live video. Double click the right mouse on the live video to enable this function, and you will see a white &

transparent arrow on the live video, click left mouse to control direction, eight directions are available. This is very convenient for Pan/Tilt operation. Double click right mouse again to exit.

# **Preset Settings**



Figure 4.5

Set Preset Position. It supports 15 preset positions. To control the camera's rotation to a preset position, click **Set Preset Position** button it will pop-up a dialog frame (Figure 4.5), choose the number (1-15) you want to set it to.

NOTE: if you set different positions with the same number, the camera will record the last position setting only.

Call Preset Position. It supports 15 preset positions. If you want to monitor an important area quickly and precisely, just click **Call Preset Position** button it will pop-up a dialog frame (Figure 4.5), choose the number, then the camera will rotate to the preset area automatically.

If you want to use Call Preset Position, you have to Set Preset Position first.

**NOTE:** For Operator, if you click other menus which operator doesn't have the right to operate, there will be a pop-up of login interface (Figure 2.6), please input the user name / password for at least 3 times to login again.

#### 2.9 For Administrator

For details see Settings as Administrator (3.1 - 3.22).

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## 3 SETTINGS AS ADMINISTRATOR

Administrator supports all the settings and operations of the camera.

There are some special functions only for administrator as below:

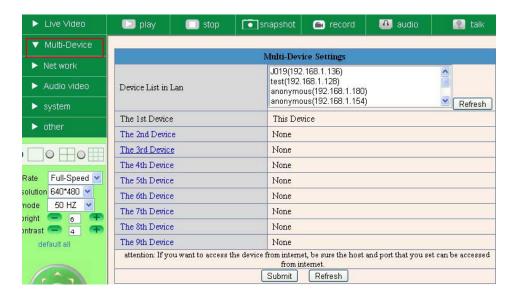


Figure 4.6

# 3.1 Multi-Device Settings



#### **Multi-Device Settings**

This camera can support max. 9 device channels at the same time.

## 3.1.1 Set Multi-Device in LAN

In the Multi-Device Settings page, you can see all devices searched in LAN. The 1st device is the default one. You can add more cameras listed in LAN for monitoring. This web software supports up to 9 IP Cameras online simultaneously.

Click **The 2nd Device** and click the item in the **Device List in Lan**, it will fill the Alias, Host, Http Port automatically, then input the correct user name and password, click **Add**. Set more devices in the same way, after you're done, click **Submit**.

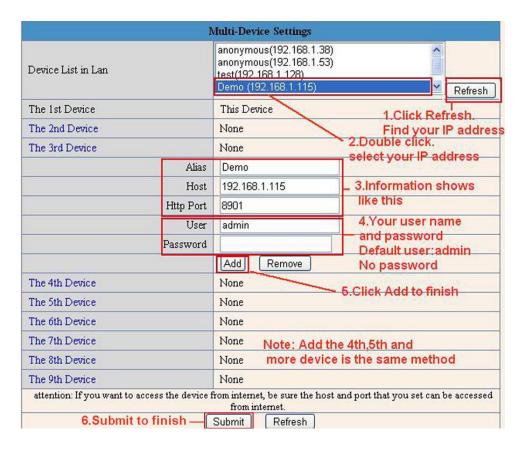


Figure 4.7

Click **Live Video** and then select to see four channels, or click to see nine channels.



Figure 4.8



Figure 4.9

#### 3.1.2 Set Multi-Device for WAN

If you want to view cameras from the internet, you have to add these devices by DDNS domain name. Make sure all these cameras you want to add have DDNS set successfully. (See 3.7 **DDNS Service Settings**)

Login to the first camera by DDNS domain name and port, this camera will be as the host camera.



Figure 5.0

Click **Multi-Device**, select **Multi-Device Settings**. Choose **the 2nd Device**; fill in the 2nd camera's Alias, Host, Http Port, User, Password, click **Add**. Set more devices in the same way, after all done, click **Submit**. **NOTE:** The Alias is optional; you can set the alias as you wish. The Host must be the camera's DDNS domain

name, and without "http://", it's not the LAN IP address. If you have several cameras, you can use the same DDNS domain name, just set different port number for each different camera.

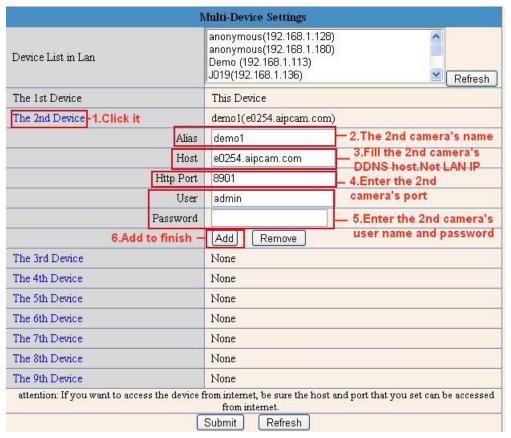


Figure 5.1

Note: Add the other camera in the same way, Click **submit** to add all of them.

	Multi-Device Settings		
Device List in Lan	anonymous(192.168.1.128) anonymous(192.168.1.129) anonymous(192.168.1.115) Demo(192.168.1.113)	Refresh	
The 1st Device	This Device		
The 2nd Device	Test(e0254.aipcam.com)		
The 3rd Device	Anonymous(ipcamera, 3322, org)		
The 4th Device	Demon(demon.dyndns.org)		
The 5th Device	None		
The 6th Device	None		
The 7th Device	None		
The 8th Device	None		
The 9th Device	None		
attention: If you want to acces	s the device from internet, be sure the host and port that you s from internet. <b>Click Submi</b>	et can be accessed t after	
	Submit Refresh finish all set		

Figure 5.2

Click **Live Video** and then select to see four channels, or to see nine channels. In this case, you can see all the cameras from a remote position by internet, for example, if you are on a business trip, you can use the first camera's (Host camera) DDNS to view all the devices via the internet.



Figure 5.3

#### 3.1.3 Upgrade Device Firmware

If you want to upgrade the camera, please upgrade Device Firmware first, then upgrade Web UI. Click **Browse** and choose correct bin file, then click **Submit** to do upgrading.

**NOTE**: Before doing an upgrade via Browser, please make sure the IP Camera Tool of your computer could find the camera's IP.

**Attention**: Please keep the power on during upgrading, and it's better to use wired mode via network cable. Please don't upgrade unnecessarily, wrong operation or incorrect upgrade bin file can damage the camera.

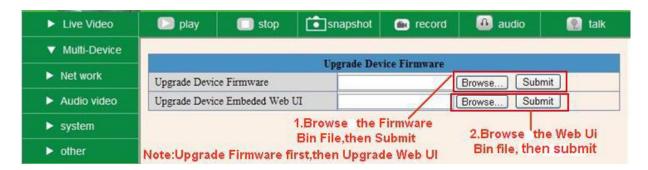


Figure 5.4

# 3.1.4 Restore Factory Settings

Click **Restore Factory Settings**, will pop-up a prompt, select **OK**, all the parameter will be returned to factory settings, and the device will reboot.

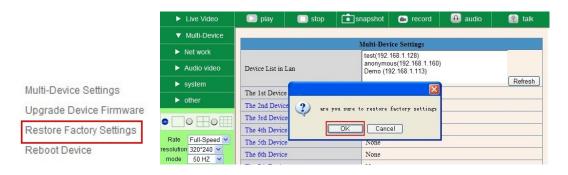


Figure 5.5

#### 3.1.5 Reboot Device

Click Reboot the device, will pop-up a prompt, select OK, then the device will reboot

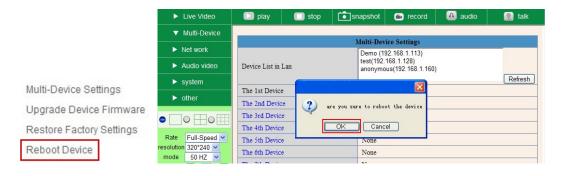


Figure 5.6

# 3.2 Network Settings

Click Network, will pop-up the prompt as below:



# 3.3 Basic Network Settings

Here you can set the camera's IP address; i.e., set the static IP address of the camera manually. You can also do the same settings from IP Camera Tool. (Figure 2.3).

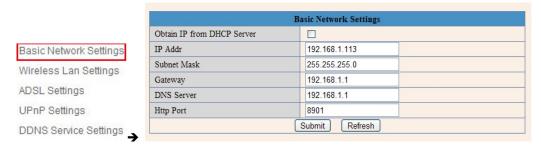


Figure 5.7

If you don't know the Subnet Mask, Gateway, DNS Server. Please check the Local Area Connection Status of your computer; it contains all this information, steps as below:

- 1. Control Panel→Network Connections→Local Area Connections→ Support → Details

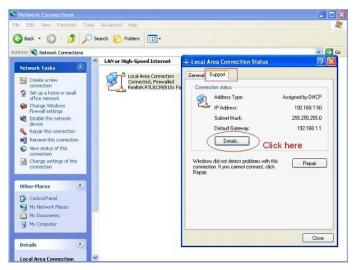


Figure 5.8

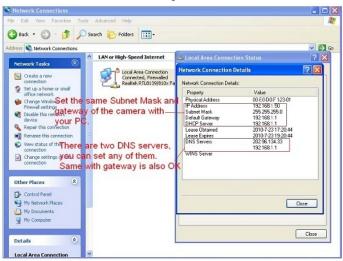


Figure 5.9

If you don't know the DNS Server, you can set it the same as Gateway.

If the router supports DHCP function, you can choose "Obtain IP from DHCP Server" to get dynamic IP.

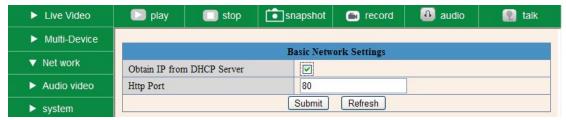


Figure 6.0

**Http Port:** In most cases, you can leave this value as-is. However, if your Internet Service Provider blocks this port, you may change it to another port number such as 85.

# 3.4 Wireless LAN Settings



Figure 6.1

You should set up your camera using a wired connection before you attempt to use it wirelessly. (See Hardware Installation).

- 1. Make sure your router is a wireless router.
- 2. Make sure the Wi-Fi antenna is installed on the camera.
- 3. Determine if your router uses encryption, (see your router's owner's manual for how to do this), if it uses encryption, note the share key.
- 4. Login to the camera using the IP Camera Tool, like you did when setting up with a network cable.
- 5. When you see the screen in Figure 6.2, click "Network" then "Wireless Lan Settings" then click on "Scan", wait and then click it again, when you see your camera in the Wireless LAN settings box, click on it.
- 6. If there is no encryption, just click "Submit", if there is encryption, input the share key, then click "Submit".
- 7. Unplug the network cable and wait about 30 seconds while the camera reboots.

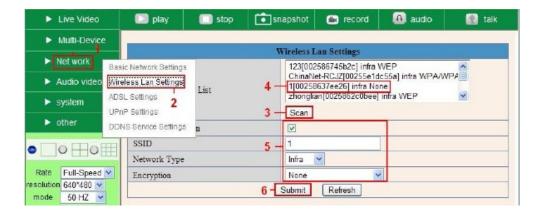


Figure 6.2



Figure 6.3

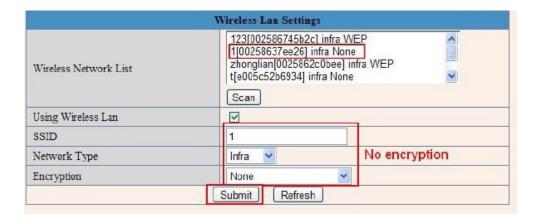


Figure 6.4

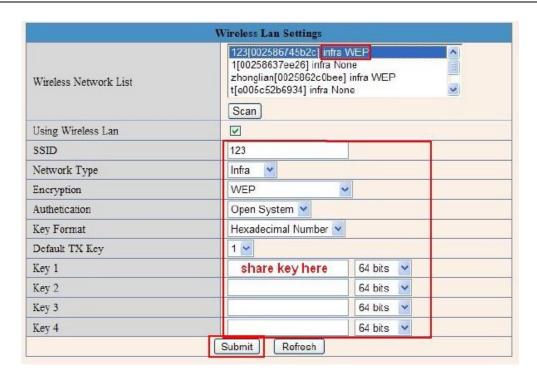


Figure 6.5

# 3.5 ADSL Settings

When connected to the Internet through ADSL directly, you can enter the ADSL username And password obtained from ISP.

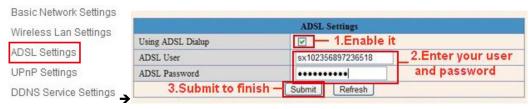


Figure 6.6 Figure 6.7

# 3.6 UPnP Settings

## Click UPnP Settings to choose Using UPnP to Map Port:

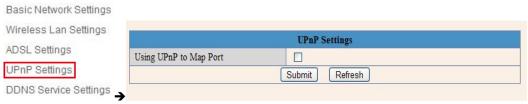


Figure 6.8

Select it and click **Submit**, then the camera will support UPnP port forwarding automatically. It's helpful for using DDNS. If your router supports UPnP, then you won't need do port forwarding in the router.

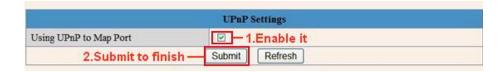


Figure 6.9

**NOTE**: Here UPnP is only for port forwarding. It relates to the security settings of your router, make sure the UPnP function of your router is ON.

**Attention**: If your router doesn't support UPnP function, it may show error information. So we recommend you do port forwarding manually in your router. (For details see Figures 7.4 - 7.9).

# 3.7 DDNS Service Settings

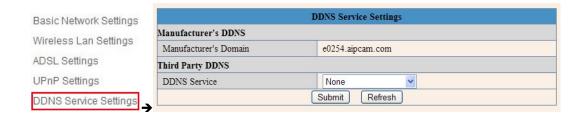


Figure 7.0

There are 2 options:

Manufacturer's DDNS: This domain is provided by the manufacturer.

Third Party DDNS: This domain is provided by the third party, such as Dyndns, Oray, 3322 etc.

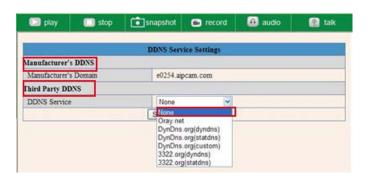


Figure 7.1

#### **Third Party DDNS**

If you use third party DDNS, please choose the server you use, such as "3322.org" or "dyndns.org" as below:

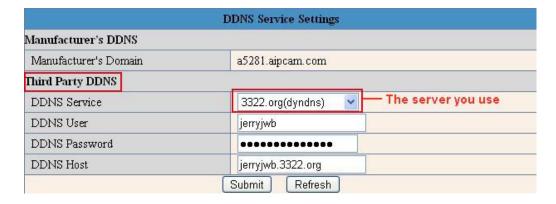


Figure 7.2

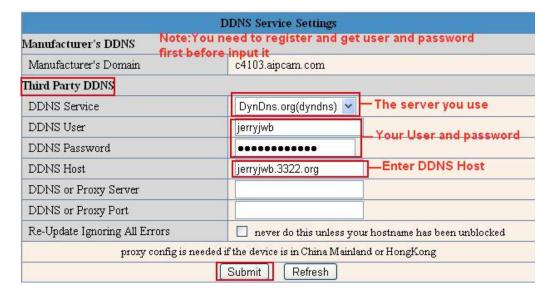


Figure 7.3

You have to register an account first, enter the user, password, and host.

NOTE: Only one DDNS can be chosen, for example, if you use the manufacturer's DDNS, the third party one won't work, if you use the third party DDNS, the manufacturer's one won't work.

#### To change the camera's port.

The default port of camera is "80", please change "80" to any other one you like, such as "81", "100", "8091" etc. (It's best to use high numbers, like 8091 for example). Click "OK", the camera will reboot, wait about 30 seconds.

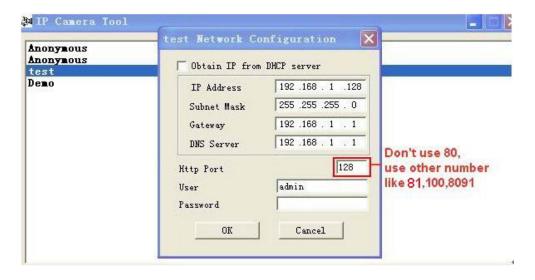


Figure 7.4

Make sure the "Subnet Mask", "Gateway", "DNS Server" is the same as your router.

#### Set Port Forwarding in the router.

This is the most important step. You need to set port forwarding in your router, to refer to the IP of your camera correctly, for DDNS to work. There are so many kinds of routers, so it's difficult to show fixed steps, but here are some samples of different router's port forwarding settings, just for reference:

#### TP-LINK:

1. Login to the router.



- 2. Choose "Forwarding", select "Virtual Servers"
- 3. Click the Add New button, pop-up below:

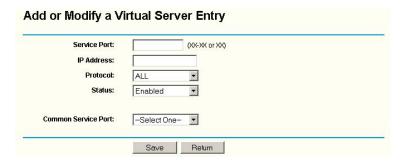


Figure 7.5

Fill in the service port (don't use 80), IP address of the camera, then click Save **NOTE**: The port and IP address should be the same as the camera.

#### **BELKIN:**

- 1. Login to the router.
- 2. Choose "Firewall", select "Virtual Servers"
- 3. Input the port (don't use 80) and IP address, then click save.

**NOTE**: The port and IP address should be the same as the camera.

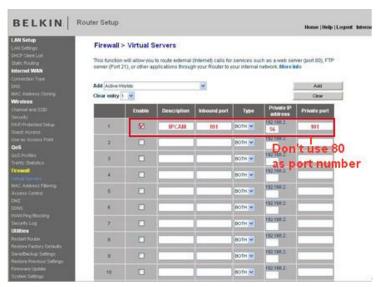


Figure 7.6

### **DLINK:**

- 1. Login to the router.
- 2. Choose "Advanced", select "Virtual Servers"
- 3. Input the port, IP address, Protocol, then click save.

**NOTE**: The "public port" & "private port" should be the same as camera's port, choose the protocol to be "both".

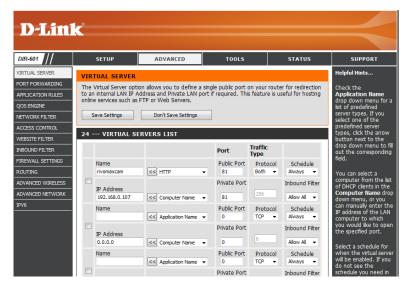


Figure 7.7

After all these 4 steps are done, you can use DDNS, check the DDNS status from the camera as below, and get the link of DDNS for internet viewing.

# Step: "Login">"System">"Device Info"



Figure 7.8



Figure 7.9

# 3.8 System Settings



Figure 8.0

### 3.8.1 Device Info

You can find the information about **Device ID**, **Firmware Version**, **Embedded Web UI Version**, **Alias**, **Alarm Status**, **DDNS Status**, **UPnP Status and MSN status**.



Figure 8.1

# 3.9 Alias Settings

Default device name is anonymous. You set any new name for your camera here, then click Submit.

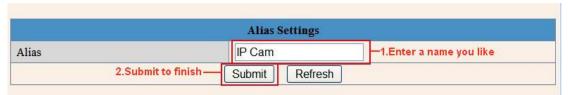


Figure 8.2

# 3.10 Date &Time Settings

Set the date and time for your camera.

Choose the Clock Time zone of your country.

You can choose Sync with NTP Server (Figure 8.3) or Sync with PC Time (Figure 8.4).



Figure 8.3



Figure 8.4

# 3.11 Users Settings

Eight accounts are acceptable for this system. Here you can set the user names and password as Administrator, Operator or Visitor, with permission for them as below:

- Visitor: In this mode, you can only view. (Details 2.7).
- Operator: You can control the direction of IP Camera and set some parameters. (Details 2.8).
- Administrator: You can setup the advanced configurations of the IP Camera. (Details 3.1-3.22).

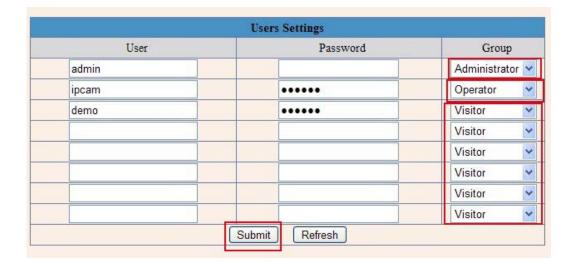


Figure 8.5

# 3.12 Pan, Tilt, (PTZ) Settings (note, there is no Zoom feature on this model)

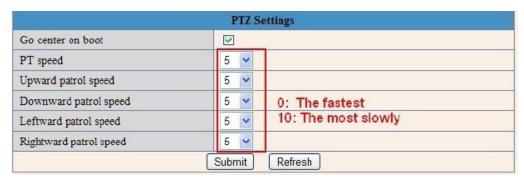


Figure 8.6

- **1. Go center on boot**: The camera rotates to the center automatically when it starts.
- 2. PT speed: Set Pan/Tilt speed.
- 3. Upward patrol speed: Set the speed of cruising upward.
- **4. Downward patrol speed**: Set the speed of cruising downward.
- **5. Leftward patrol speed**: Set the speed of cruising leftward.
- **6. Rightward patrol speed**: Set the speed of cruising rightward.

**NOTE**: Value 0 means the fastest, value 10 means the slowest. In order to protect the camera's motor, we recommend that setting the speed to value 5.

# 3.13 Indicator Settings

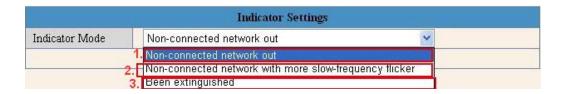


Figure 8.7

Set the pilot lamp mode, to one of the following three options:

- (1) Non-connected network out: Blinks while connected to the internet and turn off when disconnected.
- (2) **Non-connected network with more slow-frequency flicker**: Blinks while connect to the internet and more slower when disconnected.
- (3) Extinguished: Stays OFF.

### 3.14 Backup & Restore



Figure 8.8

- 1) **Backup**: Backup all the IP Camera Parameters, if you want to save all the current settings that you have set already, you can click **Submit**, then all the parameters you set will be stored as a parameters bin file.
- 2) **Restore**: Restore all the IP Camera Parameters, if you want to change the camera's settings to a certain status which has a backup, click **Browse** to load the bin file, then **Submit** it.

### Log

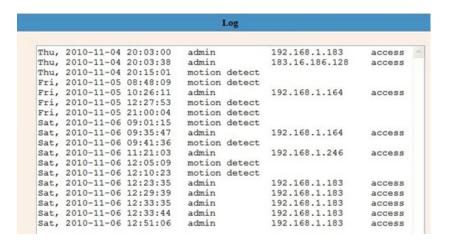
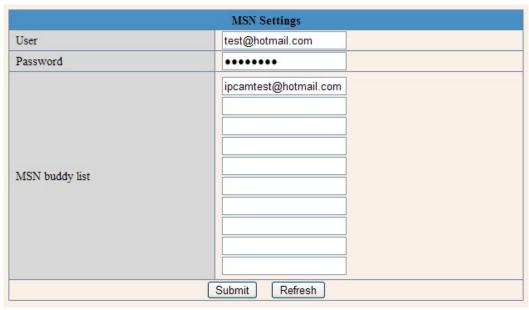


Figure 8.9

Record User information, including weekday, date, time, user name, visitor IP address etc.

### **MSN Settings**



**NOTE**: Set the port forwarding successfully before setting MSN (Refer to port forwarding in DDNS settings). Then go to the MSN settings page, fill in the correct user name and password, add the MSN buddy, max. up to 10 friends, after submitting, the user(s) will be shown in your MSN friend list.

Click System—Device Info to check the MSN status.

Device Status	
Device ID	00EA2162836A
Device Firmware Version	17.22.2.36
Device Embedded Web UI Version	20.8.1.82
Alias	DEMO_011
Alarm Status	None
DDNS Status	cipcam.com Succeed http://a5790.cipcam.com:91
UPnP Status	UPnP Succeed
MSN Status	Succeed
	Refresh

After you run your MSN, open the chat dialog, type in the word "**url?**", after a few seconds, you will get a reply for the remote access IP address for this IP camera.

# 3.15 Other Settings



Figure 9.0

Here you can configure some additional functions such as **Motion Detection**, **Alarm**, **IO Linkage**, **Schedule**, **FTP Upload**, **Alarm Mail Alert**, **Record Path**, etc.

## 3.16 Mail Service Settings

Set Mail Service Settings to enable the camera to send e-mail alerts when motion is detected.

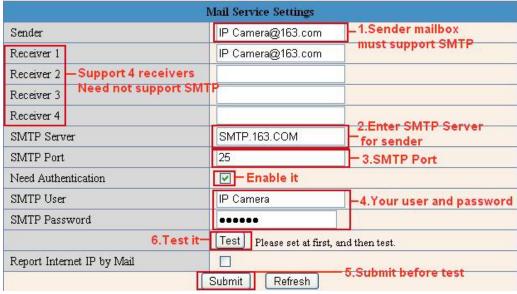


Figure 9.1

**Sender**: Make sure the sender mailbox server provider supports SMTP, and the mailbox should not enable SSL or TSL encryption.

**Receiver**: Here you can set four receivers. For receiver, there is no SMTP limitation.

**SMTP Server**: The sender's SMTP Server.

SMTP Port: The sender's SMTP Port, usually is 25, some SMTP servers have their own port, such as 587.

**Need Authentication**: If there is SMTP user & password, please select authentication.

**SMTP User**: Input correct SMTP User here. Some SMTP User is the sender's full email address, such as **test@qq.com**, some are without suffix, only the username, such as **test**.

**SMTP Password**: Input correct SMTP password here.

**NOTE:** Click **Submit** first before choosing **Test**. You will see the test result after you click **Test**.

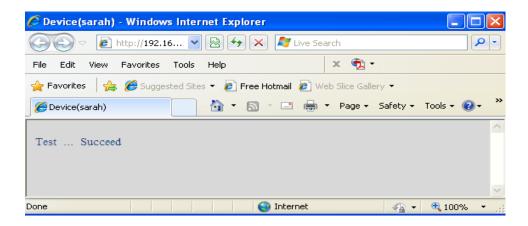


Figure 9.2

If it shows the following errors when you click **Test**. Please check that the information you filled in is correct and try again.

- 1) Cannot connect to the server.
- 2) Network Error. Please try later.
- 3) Server Error.
- 4) Incorrect user or password.
- 5) The sender is denied by the server. Maybe the server needs to authenticate the user, please check and try again.
- 6) The receiver is denied by the server. Maybe because of the anti-spam privacy of the server.
- 7) The message is denied by the server. Maybe because of the anti-spam privacy of the server.
- 8) The server does not support the authentication mode used by the device.

**Report Internet IP by Mail:** If selected, you will receive e-mails that contain the camera's internet IP. When camera is powered on or Internet IP changed, it will send the internet IP by e-mail. (For example: IPCAM's URL is http://121.213.109.69:1008).

# 3.17 FTP Service Settings

Set the FTP Service, you can upload images to your FTP server when motion is detected.



Please click Submit first before test

Figure 9.3

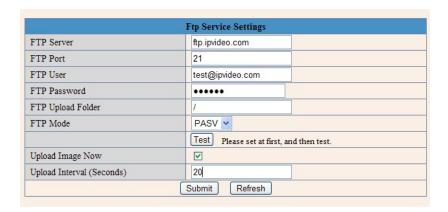


Figure 9.4

FTP Server: If your FTP server is set up in LAN. You can set as Figure 9.3.

If you have an FTP server that can be accessed from the Internet, you can set as Figure 9.4.

FTP Port: Usually the port is 21.

**FTP Upload Folder**: Make sure that the folder you plan to store images in exists. The camera cannot create the folder itself. Also, the folder must be erasable.

FTP Mode: It supports standard (POST) mode and passive (PASV) mode.

**Upload Image Now**: It will upload images when you selected it. Here **Upload Interval** refers to the time between the current image and the next image.

NOTE: Here upload image now means it can upload images freely, no alarm trigger needed.

Click **Submit** after these settings. Then click **Test**. You will see the following picture.

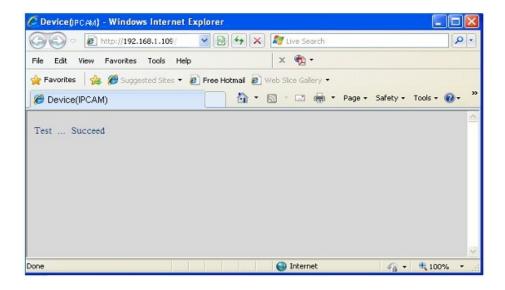


Figure 9.5

If it prompts error information as follows.

- 1) Cannot connect to the server. Please check FTP Server is correct.
- 2) Network Error. Please try later.
- 3) Server Error.
- 4) Incorrect user or password. Please check the username and password is correct.
- 5) Cannot access the folder. Please be sure the folder exists and your account is authorized.
- 6) Error in PASV mode. Please be sure the server supports PASV mode.
- 7) Error in PORT mode. PASV mode should be selected if the device is behind a NAT.
- 8) Cannot upload file. Please be sure your account is authorized.

Please check if parameters you filled in are correct. The format of image is like 000DC5D008FA (IPCAM) \_0\_20101115152525\_25.jpg

Please check if your FTP server supports this format of file name.

# 3.18 Alarm Service Settings

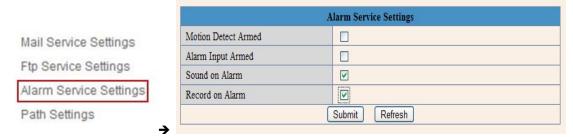


Figure 9.6

Enter Alarm Service Settings page to configure Motion Detection function.

### 3.18.1 Motion Detect Armed

If you enable Motion Detect Armed, it will record and make an alarm sound when there is motion detected.

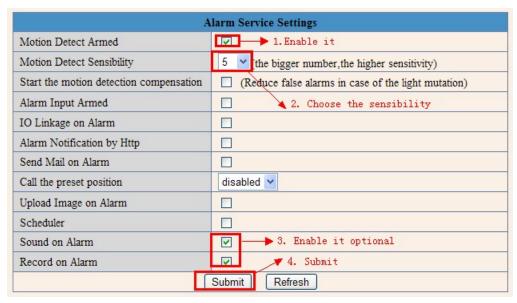


Figure 9.7

After you enable motion detect armed, if there is motion detected, the **Alarm Status** will turn to **Motion Detect Alarm**. (Figure 9.8).

	Device Status
Device ID	000DC5D008FA
Device Firmware Version	0.22.2.20
Device Embeded Web UI Version	20.8.4.23
Alias	Demo
Alarm Status	Motion Detect Alarm
DDNS Status	aipcam.com Succeed http://e0254.aipcam.com:8901
UPnP Status	UPnP Succeed

Figure 9.8

## 3.18.2 Motion Detect Sensitivity

You can choose level 1-10; level 10 means the most sensitive, 1 means the least sensitive.

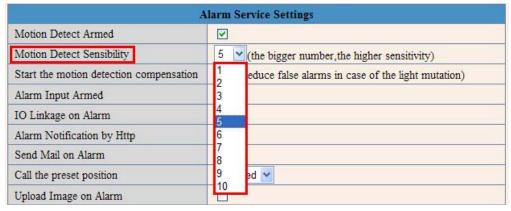


Figure 9.9

### 3.18.3 Alarm Input Armed / IO Linkage on Alarm

If you want to connect external alarm devices, when it's an alarm input device, choose **Alarm Input Armed** to enable it, when it's an output device, choose **IO Linkage on Alarm** to enable it.

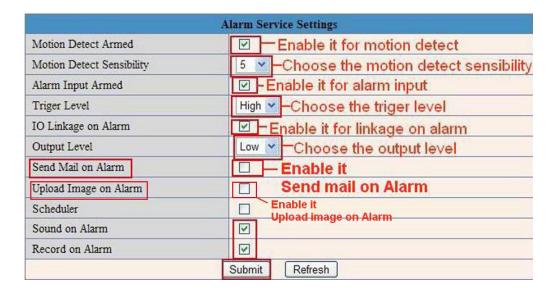


Figure 10.0

There are two options for **Trigger Level**. (Figure 10.1).

**High**: When the external alarm device is close, then the alarm is triggered.

**Low**: When the external alarm device is switching off, then the alarm is triggered.

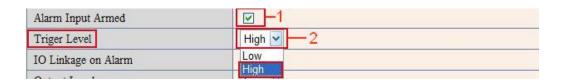


Figure 10.1

There are two options for **Output Level**. (Figure 10.2).

**High**: When chosen, the IO Pins work as a switch that is closed.

Low: When chosen, the IO Pins work as a switch that is switching off.

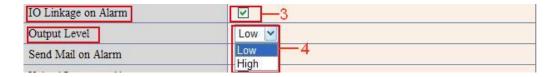


Figure 10.2

### 3.18.4 IO Pins for IO Alarm Linkage



Figure 10.3

I/O PINS: 1 Output 2 Output 3 Alarm input 4 Input (GND)

**Input pins:** The input pins can be used for 1-way external sensor input. For example, you may connect a Passive Infrared (PIR) Sensor to it for motion detection. When the external sensor is triggered, the IP camera can be programmed to send an e-mail with a picture or to control the internal relay output.

If you link an external alarm device to Pins 3 and 4, when **Alarm Input Armed** is selected (Figure 10.0), the external alarm is enabled.

Output pins: The output pins can be enable IO linkage on alarm.

You can also use 2 to control IO output Switch ON/OFF (See Figure 4.4).

**NOTE**: All the pins work as switch only.

#### 3.19 Send e-mail on Alarm

When chosen, it will send a picture to your e-mail account once alarmed. (First you should set the e-mail Service Settings. Figure 9.1).

**NOTE**: Usually 6 snapshots will be sent by one e-mail to your mailbox for each alarm triggered. Each alarm will last for 60 seconds.

### **Upload Image on Alarm**

Enable **Upload Image on Alarm** to set upload images to FTP once alarmed.

**Upload Interval**: Set the upload interval (Seconds).

NOTE: The total alarm time is 60 seconds.



Figure 10.4

#### Scheduler

Here you can set the camera alarm during the time you set. Choose Scheduler and set the date & time range. (Figure 10.5) From Monday to Sunday, and every day divided into 24 hours, each hour divided into 4 quarters. Left click the frame of the time range, it will turn to blue color, which means the time you choose to be armed. Click it again, it will turn back to gray, which means delete the scheduler.

**NOTE**: Make sure the date & time settings are correct first. (Figure 8.3).

ATTENTION: If you don't choose Scheduler, the camera will alarm anytime when motion triggered.

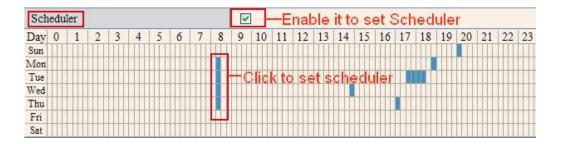


Figure 10.5

#### Sound on Alarm

When motion is detected, there will be a beep sound during the alarm, you can control this sound here. If Enabled, there will be sound once alarmed.

If Canceled, there will be no sound once alarmed.

#### **Record on Alarm**

If you want the camera do recording for every alarm, choose Record on Alarm to enable it. If you do not want the camera do recording once alarm triggered, cancel it here.

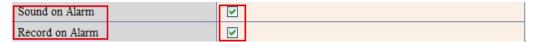


Figure 10.6

Once an alarm has occurred, there will be indication as below:

1. The corresponding status light turns Red and keeps blinking.



Figure 10.7

- 2. If you set **Sound on Alarm**, you can hear a beep sound from your computer you use when alarmed. (Figure 10.6).
- 3. If you set **Record on Alarm**, the camera will record automatically for approx one minute. You can find the record file in the folder which you set. (Figure 10.9).
- 4. If you set **Send Mail on Alarm**, you will receive e-mail alarm alert once motion is detected. (Figure 10.0).
- 5. You can also set **Scheduler** to enable the camera to send e-mails during a special time range you want. (Figure 10.5).
- 6. If you set **Upload Image on Alarm**, it will upload images to the FTP Server you set already, once alarmed. (Figure 10.4).

NOTE: Each alarm only lasts for approx one minute, all the above functions for motion detection triggered only.

#### **REC Automatically and Save to PC**

When you enable motion detect and open the camera monitoring page on the PC, if there is an alarm triggered, REC will start automatically for several seconds and save to the PC.

New Feature: Start the motion detection compensation and Alarm notification by Http.

## 3.20 Path Settings



Figure 10.8

Here you can set record path and alarm record path for the camera.

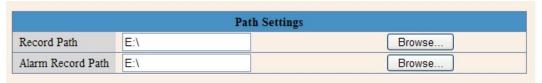


Figure 10.9

**Record Path:** Here you can set the manually record path. Click record then start manual recording, the record file will be saved to the specified path you set here.

**Alarm Record Path**: Here you can set the alarm record path. When motion is detected, and record enabled, it will start alarm record automatically, the record file will be saved to the specified path you set here.

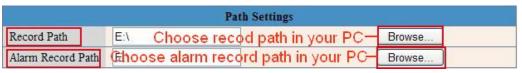


Figure 11.0

**NOTE**: If you couldn't set the path here in Windows 7 or Vista, please do it as below:

Windows 7 or Vista's security level is higher than Windows XP, for "Path Settings"

- 1. User could add the Device IP address to the IE's 'Trusted sites' first. The step is:
- "IE browser $\rightarrow$ Tool $\rightarrow$ Internet Proper $\rightarrow$ Security $\rightarrow$ Trusted sites $\rightarrow$ Sites $\rightarrow$ Add".
- 2. You can also run the IE as administrator, input the IP address of the camera manually. (Figure 11.1).

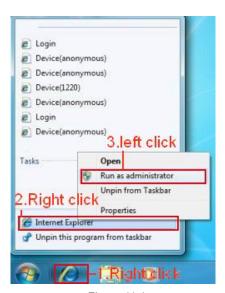


Figure 11.1

# 3.21 Server Push Mode (For Safari, FireFox, Google Browser)

Choose Server Push Mode, login the camera, you will see the main user interface as below:



Figure 11.2

NOTE: Server Push Mode does not support ActiveX.

**Play, Stop, Record, Audio, Talk, Multi-device settings, Path settings** functions are controlled by ActiveX, so if you use Safari, Firefox, Google chrome browser, it is not possible to use these options. The other functions are the same as for **IE Browser**.

# 3.22 Sign in mobile phone

If you are using a mobile phone, choose **Sign in mobile phone**, login to the camera, you will see the main user interface as below:



Figure 11.3

NOTE: Mobile phone Mode doesn't support ActiveX.

In mobile phone mode, it only supports some simple functions, such as **Resolution**, **Mode**, **Bright**, **Contrast**, **Pan/Tilt control**, **Snapshot**, **Reversal**, **Mirror**, **IO Linkage** functions.

### 4. APPENDIX

### 4.1 Frequently Asked Questions

Note: For most problems you might encounter, please check Network connections first.

Check the working status revealed by the indicators on the network server, hub, exchange and network card. If abnormal, check the network connections.

### 4.1.1 I have forgotten the administrator username and/or password.

To reset the administrator username and password, press and hold down the RESET BUTTON for 15 seconds. Release the power button and the username and password will be reset back to the factory default administrator username and password.

Default administrator username: admin

Default administrator password: None, i.e., no password

### 4.1.2 Subnet doesn't match, dbclick to change

If IP Camera Tool shows error information "Subnet doesn't match, dbclick to change!" Please choose **Obtain IP from DHCP server**. (Figure 2.2).

If it still shows this error after obtaining IP from DHCP server, please check local area connection of your computer, change subnet, gateway of the camera. Keep them in the same subnet as your computer. (Figure 2.3).

# 4.1.3 IP Address configuration

Check whether IP address of the IP camera server shares the same subnet as your computer: Click My Computer > Control Panel > Network & Dial-up Connections > LAN > Attributes > Internet Protocols (TCP/IP), and check IP Address and Subnet Mask. Make sure they are in the same subnet when configuring the camera's IP address manually.

### 4.1.4 Can't access IP camera via the Internet

Some typical reasons:

- 1. ActiveX controller is not installed correctly (for more details see: Figure 2.9 Figure 3.1).
- 2. The port that the camera is using is blocked by your Firewall or Anti-virus software. Please change to another port number and try again. (Figure 3.2).
- 3. Port forwarding is not successful (for more details see Figure 7.4 Figure 7.9). Double check these settings and make sure they are correct.

### 4.1.5 IP Camera Tool could not find camera's IP

Make sure the camera is connected to its power supply and the power supply is plugged in.

Check if the network cable is not loose.

Make sure DHCP is enabled in your router, don't enable MAC address filter.

Make sure that firewall or anti-virus software does not block the camera. You can add the camera as a trusted site in your firewall or anti-virus software.

### 4.1.6 UPnP always fails

UPnP only contains port forwarding in our recent software. Sometimes, it might fail to do port forwarding automatically because of firewall or anti-virus software. It also relates to your router's security settings. So we recommend you do port forwarding manually. You can view your camera via the Internet successfully after you do port forwarding manually in your router.

### 4.1.7 Couldn't find the shortcut on desktop after install IP camera tool

If you use Windows 7 or Vista, and you could not find the shortcut on desktop after installing the IP camera tool, please check if the path of the tool port to is correct.

For example, was it was pointing to <a href="C:\Windows\System32\IPCamera.exe">C:\Windows\System32\IPCamera.exe</a>.

Please fix this by pointing the shortcut to the correct path <u>C:\Windows\SysWOW64\IPCamera.exe</u>. After this you should be able to use the shortcut without any problems.

## 4.1.8 I can't change the record path

When you use Windows 7 or Vista, you may be not able to change the record path due to the security settings of your computer.

1. Please add the camera as a trusted site to solve this issue.

The step is: "IE browser→Tool→Internet Proper→Security→Trusted sites→Sites→Add".

2. You can also run the IE as administrator; input the IP address of the camera manually.

## 4.1.9 I can't find multi-device settings and record icon

Record and multi-device function are controlled by ActiveX controller.

So if you use Safari, Firefox, or Google chrome, it is not possible to use these functions.

## 4.1.10 Camera cannot connect wirelessly

If your camera could not connect wirelessly after you set wireless settings and unplug the Network cable:

Please check whether your settings are correct. (Details: Wireless LAN settings).

If the camera can't connect wirelessly it is usually because of wrong settings.

Double check the SSID, Encryption share key, Channel, should be the same as your wireless router.

Share key should not contain special characters, only letters and numbers.

Don't enable MAC address filter.

### 4.1.11 I can't see other cameras in multi-device configuration by remote access

If you want to view all the cameras in your WAN. Make sure that each camera you add in multi-device settings can be logged-in using DDNS name and port number. Use DDNS domain name to fill in the host checkbox, not camera's LAN IP. Double check your settings. (Details: **Set Multi-Device for WAN**).

### 4.1.12 I only see black screen or unusual code when remotely logged in

If you could access the login page in a remote place, it indicates that your DDNS settings are correct. But if you could not see live video, but only some undefined characters, it may be internet speed problems, especially if the camera works OK via Wi-Fi.

## 4.1.13 There's no picture (Problems with ActiveX Controller)

If using IE browser to connect the camera for the first time, and there is no image displayed, you might need to install ActiveX. You need to change some browser settings to enable ActiveX. (See: **For IE Browser**).

#### 4.1.14 Problems with network bandwidth

The image frame rate is subject to the following factors:

- 1. Network bandwidth.
- 2. PC performance, network environment and display preference setting (brightness, theme, etc).
- 3. The number of visitors (too many visitors will slow down the image frame rate).
- 4. Choice of switch or hub (use a switch for multiple IP Camera Servers rather than a HUB).

### 4.1.15 How to register an account from DDNS web

You can enter http://www.dyndns.com and register an account.

## 4.1.16 Pop-up the prompt" Fail to connect to the device..."?

This prompt only appears in the case of using multiple cameras.

When you set multiple cameras, and the device status light changes to yellow please make sure the cameras are connected to power and working correctly.

### 4.2 Default Parameters

#### **Default network Parameters**

IP address: dynamic Subnet mask: dynamic Gateway: dynamic DHCP: Disabled

DDNS: factory DDNS and third party DDNS

### Username and password

Default administrator username: admin

Default administrator password: None, i.e., leave blank.

# 5. SPECIFICATIONS

Model	XX34A	
Image Sensor		
Sensor	1/4" Color CMOS Sensor	
Resolution	640 x 480 Pixels (300k Pixels)	
IR Lens	f: 6mm, F 2.0 (3.6mm lens optional)	
Viewing Angle	60 Degree (3.6mm lens is 90Degree)	
Minimum Illumination	0.5Lux @ F2.0	
Video/Image Setting		
Video Compression	MJPEG	
Video Frame Rate	15fps(VGA), 30fps(QVGA)	
Resolution	640 x 480(VGA), 320 x 240(QVGA)	
Flip Mirror Images	Vertical / Horizontal	
Light Frequency	50Hz, 60Hz or Outdoor	
Video Parameters	Brightness, Contrast	
Audio talk-back	Built-in Mic	
Communication		
System Interface	10Base-T/100Base-TX Ethernet Port	
Supported Protocols	TCP/IP, DHCP, SMTP, HTTP, DDNS, UPNP, PPPoE, FTP, DNS, UDP, GPRS	
Wireless LAN	Supports wireless networks (Wi-Fi/802.11/b/g)	
WEP Encryption	Disable / 64 bit / 128 bit	
WPA/WPA2 Encryption	TKIP / AES	
Physical / Environment		
Power Supply	5VDC/2A External Power Adapter	
Power Consumption	5W (Max.)	
Operate Temperature	0°C ~ 55°C (14°F ~131°F)	
Operate Humidity	20%-85% non-condensing	
Storage temperature	-10°C ~ 60°C (14°F ~140°F)	
Storage Humidity	0%-90% non-condensing	
PC System Requirement		
CPU	2.0 GHZ or above	
Memory Size	256 MB or above	
Display Card	64M or above memory	
Supported OS	Microsoft Windows 98/ME/2000/XP/Vista/7	
Browser	IE6.0, IE7.0, IE8.0, Firefox, Safari, Google chrome etc	
Certification	CE, FCC, RoHS	
Warranty	Limited 90 day warranty	

6. OBTAINING TECHNICAL SUPPORT

We hope your experience with your IP network camera is enjoyable, but if you experience any issues or have

any questions that this User's Guide has not answered, please visit www.x10.com/support, e-mail

support@x10.com or call 1-800-442-5065.

This user manual is based on the latest version of our camera.

System Firmware: 17.37.2.41

Web UI: 20.8.1.95

If your camera does not support some special functions shown in this manual, please contact our technical

support team to obtain the latest Firmware and WEB UI file for upgrading.

**FCC Caution** 

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE

UNDESIRED OPERATION.

This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, it may cause interference to radio and television reception. It has been type tested and

found to comply with the limits for remote control devices in accordance with the specifications in Sub-Parts B and C of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by unplugging the equipment, try to correct the

interference by one or more of the following measures.

• Reorient the antenna of the radio/TV experiencing the interference.

· Relocate the equipment with respect to the radio/TV.

· Move the equipment away from the radio/TV.

• Plug the equipment into an outlet on a different electrical circuit from the radio/TV experiencing the interference.

If necessary, consult your local dealer for additional suggestions.

NOTE: Modifications to this product will void the user's authority to operate this equipment.

X10 Wireless Technology, Inc. Limited One Year Warranty

X10.com, a division of X10 Wireless Technology, Inc. (X10) warrants X10 products to be free from defective material and

workmanship for a period of one (1) year from the original date of purchase at retail. X10 agrees to repair or replace, at its sole

discretion, a defective X10 product if returned to X10 within the warranty period and with proof of purchase. If service is

required under this warranty:

Call 1-800-442-5065, visit www.x10.com, or e-mail support@x10.com.

For help or more information on setup, please visit: www.x10.com/support

X10 Wireless Technology, Inc., 400 Forge Way, Rockaway, NJ 07866

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